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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **VAN CASTEREN, Dolf, H., J.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: **BOSMA, Rudolphus, H., A.**; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

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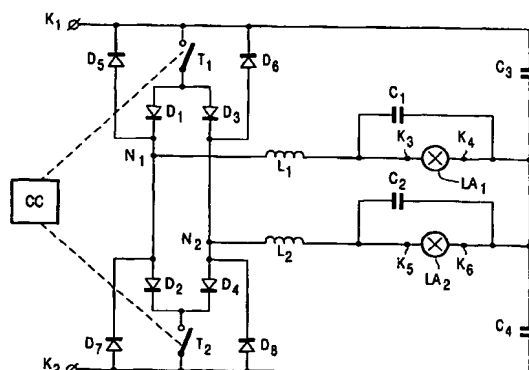
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[Continued on next page]

(54) Title: CIRCUIT ARRANGEMENT FOR OPERATING DISCHARGE LAMPS



(57) Abstract: A DC-AC converter in a half bridge configuration is used for operation with high pressure discharge lamps as well as low pressure discharge lamps. The converter consists in two switches (T1-T2) serially connected through a first series of diodes (D1, D2) and a second series of diodes (D3,D4) to which at their middle points (N1, N2) a first and a second lamp loads (L1,L2,LA1,LA2) are connected. Furthermore, the second terminals of the lamp loads are connected to the middle point of a series of capacitors (C3,C4) which are also connected to the terminals (K1,K2) of the supply voltage source. The converter includes also four diodes (D5,D6,D7,D8) which shunt the switches (T1,T2) and their respective series of diodes (D1,D2,D3,D4). The switches (T1,T2) are controlled by a controller (CC) which renders alternatively conductive at low frequency the two switches (T1,T2). In the first operating state, the first switch (T1) is rendered conductive and non-conductive at a high-frequency while the second switch (T2) is maintained in a non-conductive state, in the second operating state the second switch (T2) is rendered conductive and non-conductive at high-frequency while the first switch (T1) is maintained in a non-conductive state. The series of two capacitors (C3,C4) can be replaced by a series of two switches (T3,T4) in order to obtain a full bridge configuration of the converter. The particular configuration of the network and its operating mode allow to drive the lamp loads in such a way that the difference in power consumed by the lamps is comparatively small.

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 384 544 B1 (GREENWOOD SIMON RICHARD ET AL) 7 May 2002 (2002-05-07)	1, 2, 4-6
Y	column 2, line 33 -column 6, line 30; figure 5	3
Y	US 6 414 448 B1 (DURKAN THOMAS ET AL) 2 July 2002 (2002-07-02)	3
	column 5, line 29 -column 5, line 55; figure 5	
A	US 2002/047609 A1 (WENG DA FENG) 25 April 2002 (2002-04-25)	1-6
	page 2, paragraph 28 -page 4, paragraph 38; figures 9,12	
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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

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